

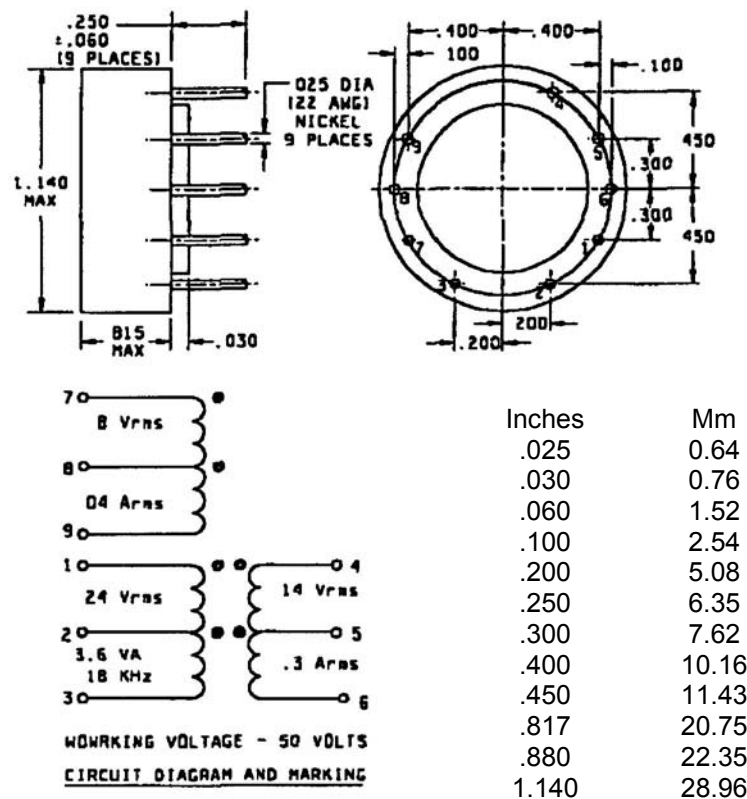
MIL-PRF-27/29B
23 April 2003
SUPERSEDING
MIL-PRF-27/29A
15 April 1987

PERFORMANCE SPECIFICATION SHEET

TRANSFORMER, AUDIO FREQUENCY

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the transformer described herein shall consist of this document and the latest issue of specification MIL-PRF-27.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking shall be on the side of the case.

FIGURE 1. Dimensions and configurations.

MIL-PRF-27/29B

REQUIREMENTS: (When numbers in parentheses, i.e., (1-3) are used, they indicate the winding and the extreme terminals of the winding.)

Electrical ratings:

Primary voltage: (1-3): 24 volts CT, 18 kHz.

Primary current: (1-3): .15 amperes rms.

Secondary voltage: (4-6) 14 volts rms CT.
(7-9) 8 volts rms CT.

Secondary current: (4-6) .3 ampere rms.
(7-9) .04 ampere rms.

Working voltage: 50 volts.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Material: Diallyl phthalate, ASTM-D5948, type SDG.

Terminals: Nickel, pin type.

Terminal height: .250 \pm .060.

Weight: 4 ounces.

Altitude:

Operating: 10,000 feet.

Nonoperating: 40,000 feet.

Operating temperature range: -55°C to +105°C.

Maximum operating temperature: +105°C (ambient plus temperature rise).

Temperature rise: 20°C with 24 volts, 18 kHz across (1-3) at an ambient temperature of 85°C.

Terminal strength: Method 211 of MIL-STD-202, test condition A, 2 pounds.

Dielectric withstanding voltage (at sea level): 500 volts rms (1-3) (4-6) (7-9).

Insulation resistance: Method 302 of MIL-STD-202, test voltage, 100 volts dc.

MIL-PRF-27/29B

Electrical characteristics:

No load: With 24 volts, 18 kHz across (1-3)

Current in (1-3): .15 ampere maximum.

Voltage across (4-6): 14.6 V maximum.

Voltage across (7-9): 8.4 V maximum.

Rated load: With 24 volts, 18kHz across (1-3)

Current in (4-6): .3 ampere maximum.

Voltage across (4-6): 14 V ± 2 percent.

Current in (7-9): .04 ampere maximum.

Voltage across (7-9): 8 V ± 2 percent.

Polarity: Terminals 1, 4, and 7 shall be of the same instantaneous polarity.

Marking location: See figure 1.

Part or Identification Number (PIN): M27/29-01.

Custodians:

Army - CR

Navy - EC

Air Force - 11

Preparing activity:

DLA - CC

(Project 5950-1076)

Review activities:

Army - AR, CR4

Navy - AS, MC

Air Force - 19, 99